

CLAIMS

1. A recording and/or reproducing method for a record medium, the method comprising the steps of:

reading type information from the record medium when data is recorded or reproduced to or from the record medium on which at least the type information has been recorded;

reading type information from a recording and/or reproducing apparatus for the record medium;

comparing the type information that has been read from the record medium with the type information that has been read from the apparatus; and

performing a recording or reproducing process for the record medium using information corresponding to the type information stored in the apparatus when the type information that has been read from the record medium matches the type information that has been read from the apparatus.

2. The recording and/or reproducing method for the record medium as set forth in claim 1, the method further comprising the step of:

determining which of the type information that has been read from the record medium or the type information that has been read from the apparatus is type information that represents a later generation when the type information that has been read from the record medium does not match the type information that

has been read from the apparatus.

3. The recording and/or reproducing method for the record medium as set forth in claim 2, the method further comprising the step of:

5 canceling the recording or reproducing process when the determined result of the determining step represents that the type information that has been read from the record medium is type information that represents a later generation than the type information that has been read from the apparatus.

4. The recording and/or reproducing method for the record medium as set forth in claim 3, the method further comprising the step of:

10 performing an indication for prompting the user to obtain type information that represents the later generation.

5. The recording and/or reproducing method for the record medium as set forth in claim 2, the method further comprising the step of:

15 performing the recording or reproducing process using information corresponding to the type information stored in the apparatus when the determined result of the determining step represents that the type information that has been read from the apparatus is type information that represents a later generation than the type information that has been read from the record medium.

6. The recording and/or reproducing method for the record medium as set forth in claim 5, the method further comprising the step of:

performing an indication that represents that the type information that has been read from the record medium is former type information.

7. The recording and/or reproducing method for the record medium as set forth in claim 5,

wherein a recording process of the recording or reproducing process is a process including an encrypting process using information corresponding to the type information stored in the apparatus, and

wherein a reproducing process of the recording or reproducing process is a process including a decrypting process using information corresponding to the type information stored in the apparatus.

8. The recording and/or reproducing method for the record medium as set forth in claim 1, the method further comprising the steps of:

performing an encoding process for data recorded on the record medium using information corresponding to the type information stored in the apparatus; and

performing a decoding process for data that has been read from the record medium.

9. The recording and/or reproducing method for the record medium as set forth in claim 8,

wherein the encoding process is a process including an encrypting process using information corresponding to the type information stored in the apparatus, and

5 wherein the decoding process is a process including a decrypting process using information corresponding to the type information stored in the apparatus.

10. The recording and/or reproducing method for the record medium as set forth in claim 9,

wherein the information corresponding to the type information stored in the apparatus is key information.

11. A recording and/or reproducing method for a record medium, the method comprising the steps of:

reading address information from the record medium when data is recorded or reproduced to or from the record medium on which the address information has been recorded, the address information including at least type information;

extracting type information from the address information that has been read;

reading type information from a recording and/or reproducing apparatus for the record medium;

25 comparing the type information that has been extracted with the type information that has been read from the apparatus; and

performing a recording or reproducing process
for the record medium using information corresponding
to the type information stored in the apparatus when
the type information that has been extracted matches
the type information that has been read from the
apparatus.

12. The recording and/or reproducing method for
the record medium as set forth in claim 11, the method
further comprising the step of:

determining which of the type information
that has been extracted or the type information that
has been read from the apparatus is type information
that represents a later generation when the type
information that has been extracted does not match the
type information that has been read from the apparatus.

13. The recording and/or reproducing method for
the record medium as set forth in claim 12, the method
further comprising the step of:

canceling the recording or reproducing
process when the determined result of the determining
step represents that the type information that has been
extracted is type information that represents a later
generation than the type information that has been read
from the apparatus.

14. The recording and/or reproducing method for
the record medium as set forth in claim 13, the method
further comprising the step of:

performing an indication for prompting the user to obtain type information that represents the later generation.

15. The recording and/or reproducing method for the record medium as set forth in claim 12, the method further comprising the step of:

performing the recording or reproducing process using information corresponding to the type information stored in the apparatus when the determined result of the determining step represents that the type information that has been read from the apparatus is type information that represents a later generation than the type information that has been extracted.

16. The recording and/or reproducing method for the record medium as set forth in claim 15, the method further comprising the step of:

performing an indication that represents that the type information that has been extracted is former type information.

17. The recording and/or reproducing method for the record medium as set forth in claim 15,

wherein a recording process of the recording or reproducing process is a process including an encrypting process using information corresponding to the type information stored in the apparatus, and

wherein a reproducing process of the recording or reproducing process is a process including

a decrypting process using information corresponding to the type information stored in the apparatus.

18. The recording and/or reproducing method for the record medium as set forth in claim 11, the method further comprising the steps of:

performing an encoding process for data recorded on the record medium using information corresponding to the type information stored in the apparatus; and

performing a decoding process for data that has been read from the record medium.

19. The recording and/or reproducing method for the record medium as set forth in claim 18,

wherein the encoding process is a process including an encrypting process using information corresponding to the type information stored in the apparatus, and

wherein the decoding process is a process including a decrypting process using information corresponding to the type information stored in the apparatus.

20. The recording and/or reproducing method for the record medium as set forth in claim 19,

wherein the information corresponding to the type information stored in the apparatus is key information.

21. The recording and/or reproducing method for

the record medium as set forth in claim 11,

wherein the record medium is a disc-shaped record medium, and

5 wherein the address information has been recorded in a lead-in area of the disc-shaped record medium.

22. The recording and/or reproducing method for the record medium as set forth in claim 21,

wherein the address information has been recorded in such a manner that grooves pre-formed on the disc-shaped record medium have been wobbled, and

wherein the type information have been embedded at predetermined intervals to the address information.

23. A recording and/or reproducing apparatus for a record medium, the apparatus comprising:

a head portion for scanning the record medium on which at last type information has been recorded;

20 a signal processing portion for supplying record data to be recorded on the record medium to said head portion and performing a decoding process for data that has been read from the record medium by said head portion;

25 a storing portion for storing type information and information corresponding thereto; and

a controlling portion for reading the type information from the record medium, reading the type

information from said storing portion, comparing the type information that has been read from the record medium with the type information that has been read from said storing portion, and causing said processing portion to perform a recording or reproducing process for the record medium using information corresponding to the type information stored in said storing portion when the type information that has been read from the record medium matches the type information that has been read from said storing portion when data is recorded or reproduced to or from the record medium.

24. The recording and/or reproducing apparatus for the record medium as set forth in claim 23,

wherein said controlling portion has:

a comparing portion for comparing the type information that has been read from the record medium with the type information that has been read from said storing portion.

25. The recording and/or reproducing apparatus for the record medium as set forth in claim 23,

wherein said controlling portion determines which of the type information that has been read from the record medium or the type information that has been read from said storing portion is type information that represents a later generation when the type information that has been read from the record medium does not match the type information that has been read from said

storing portion.

26. The recording and/or reproducing apparatus
for the record medium as set forth in claim 25,

5 wherein said controlling portion causes said
signal processing portion to cancel the process when
the type information that has been read from the record
medium is type information that represents a later
generation than the type information that has been read
from said storing portion.

27. The recording and/or reproducing apparatus
for the record medium as set forth in claim 26, the
apparatus further comprising:

a displaying portion,

15 wherein said controlling portion causes said
displaying portion to perform an indication for
prompting the user to obtain the type information that
represents the later generation.

28. The recording and/or reproducing apparatus
for the record medium as set forth in claim 25,

20 wherein said controlling portion causes said
signal processing portion to perform the process using
information corresponding to the type information
stored in said storing portion when the type
information that has been read from said storing
25 portion is type information that represents a later
generation than the type information that has been read
from the record medium.

29. The recording and/or reproducing apparatus for the record medium as set forth in claim 28, the apparatus further comprising:

a displaying portion,

5 wherein said controlling portion causes said displaying portion to perform an indication that represents that the type information that has been read from the record medium is former type information.

30. The recording and/or reproducing apparatus for the record medium as set forth in claim 23,

10 wherein said signal processing portion performs a process including an encrypting process using information corresponding to the type information stored in said storing portion and a process including a decrypting process using information corresponding to the type information stored in said storing portion.

31. The recording and/or reproducing apparatus for the record medium as set forth in claim 30,

15 wherein the information corresponding to the type information stored in said storing portion is key information, and

20 wherein the type information is information that represents a generation of the key information.

25 32. A record medium on which address information including type information that represents a generation of information for performing an encrypting process for at least data to be recorded has been recorded.

33. The record medium as set forth in claim 32,
wherein the information for performing the
encrypting process is key information.

34. The record medium as set forth in claim 32,
wherein the record medium is a disc-shaped
record medium, and

wherein the address information has been
recoded in a lead-in area of the disc-shaped record
medium.

35. The record medium as set forth in claim 34,
wherein the address information has been
recorded in such a manner that grooves pre-formed on
the disc-shaped record medium have been wobbled, and

wherein the type information has been
embedded at predetermined intervals to the address
information.

36. A recording and/or reproducing method for a
record medium, the method comprising the steps of:

reading type information of key information
from the record medium when data is recorded or
reproduced to or from the record medium on which at
least the type information of the key information has
been recorded;

reading type information of key information
from a recording and/or reproducing apparatus for the
record medium;

comparing the type information that has been

read from the record medium with the type information
that has been read from the apparatus; and

controlling a recording or reproducing
operation corresponding to a compared result of the
comparing step.

37. The recording and/or reproducing method for
the record medium as set forth in claim 36, the method
further comprising the step of:

recording or reproducing data to or from the
record medium using information corresponding to the
type information stored in the apparatus when the type
information that has been read from the record medium
matches the type information that has been read from
the apparatus.

38. The recording and/or reproducing method for
the record medium as set forth in claim 37, the method
further comprising the step of:

determining which of the type information
that has been read from the record medium or the type
information that has been read from the apparatus is
type information that represents a later generation
when the type information that has been read from the
record medium does not match the type information that
has been read from the apparatus.

39. The recording and/or reproducing method for
the record medium as set forth in claim 38, the method
further comprising the step of:

canceling the recording or reproducing
process when the determined result of the determining
step represents that the type information that has been
read from the record medium is type information that
5 represents a later generation than the type information
that has been read from the apparatus.

40. The recording and/or reproducing method for
the record medium as set forth in claim 39, the method
further comprising the step of:

performing an indication for prompting the
user to obtain the type information that represents the
later generation.

41. The recording and/or reproducing method for
the record medium as set forth in claim 38, the method
further comprising the step of:

performing the recording or reproducing
process using information corresponding to the type
information stored in the apparatus when the determined
result of the determining step represents that the type
20 information that has been read from the apparatus is
type information that represents a later generation
than the type information that has been read from the
record medium.

42. The recording and/or reproducing method for
25 the record medium as set forth in claim 41, the method
further comprising the step of:

performing an indication that represents that

the type information that has been read from the record medium is former type information.

43. The recording and/or reproducing method for the record medium as set forth in claim 41,

5 wherein a recording process of the recording or reproducing process is a process including an encrypting process using information corresponding to the type information stored in the apparatus, and

wherein a reproducing process of the recording or reproducing process is a process including a decrypting process using information corresponding to the type information stored in the apparatus.

44. The recording and/or reproducing method for the record medium as set forth in claim 36, the method further comprising the steps of:

performing an encoding process for data to be recorded to the record medium using information corresponding to the type information stored in the apparatus; and

20 performing a decoding process for data that has been read from the record medium using information corresponding to the type information stored in the apparatus.

45. The recording and/or reproducing method for the record medium as set forth in claim 44,

25 wherein the encoding process is a process including an encrypting process using information

corresponding to the type information stored in the apparatus, and

wherein the decoding process is a process including a decrypting process using information corresponding to the type information stored in the apparatus.

46. The recording and/or reproducing method for the record medium as set forth in claim 36,

wherein the key information has been recorded in address information that has been recorded in the record medium.

47. The recording and/or reproducing method for the record medium as set forth in claim 46,

wherein the record medium is a disc-shaped record medium, and

wherein the address information has been recorded in a lead-in area of the disc-shaped record medium.

48. The recording and/or reproducing method for the record medium as set forth in claim 47,

wherein the address information has been recorded in such a manner that grooves pre-formed on the disc-shaped record medium have been wobbled, and

wherein the type information have been embedded at predetermined intervals to the address information.